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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,413	04/27/2001	Brett W. Emsley	6573-68375	1376

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BARNES & THORNBURG LLP
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EXAMINER

USTARIS, JOSEPH G

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/844,413	Applicant(s) EMSLEY ET AL.	
	Examiner Joseph G. Ustaris	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12, 27, 28, 35, 36 and 42-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 27, 28, 35, 36, and 42-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 18 August 2006 in application 09/844,413. Claims 11, 12, 27, 28, 35, 36, and 42-61 are pending. No claims are amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 12, 27, 28, 35, 36, 42-47, and 51-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinger et al. (US006802032B1) in view of Chappell (US006425132B1) and Valliani et al. (US006234389B1).

Regarding claim 11, Budinger et al. (Budinger) discloses an instrument for "testing a CATV network" (See Fig. 1, handheld computer 50A or 50B; column 4 lines 30-35). The computer has "an input port for receiving first information from the network" where the computer receives and processes status and error messages from the equipment that are part of the network (See Figs. 1 and 2; column 3 lines 19-35 and column 7 line 61 – column 8 line 5). The handheld computer furthermore has a "user interface" to enter commands (See Fig. 3) and the computer is coupled to the network through a RS-232 port or "a serial port for coupling to the network" (See Figs. 1, 2, and

2B; column 7 lines 8-20). However, Budinger does not disclose (1) creating "second information for communication over the network" and (2) a "signature pad".

(1) Chappell discloses a system for testing a CATV system (See Fig. 1).

Chappell discloses a mobile field client that is able to connect to the CATV network. The technician is able to test upstream communications by entering data into the field client that will be sent to the headend or "second information for communication over the network". The results from the message are sent back to the field client in order for the technician to determine the condition of the CATV system (See column 5 line 59 – column 6 line 30). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger to perform testing on the reverse path by creating "second information for communication over the network", as taught by Chappell, in order to increase the testing capabilities of the handheld computer thereby providing the user with more tools to troubleshoot the network with.

(2) Valliani et al. (Valliani) discloses a handheld computer or PDA (See Fig. 6).

Valliani discloses that the PDA can have an additional module attached to the PDA to accept signatures on a signature unit. The signature is then transmitted over the network (See Fig. 6; column 7 lines 30-48). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger to be able to attach an additional signature unit or "signature pad", as taught by Valliani, in order to expand the capabilities of the

handheld computer thereby providing a means for receiving signatures from customers that authorizes services to be performed.

Furthermore, when the signature unit is attached to the handheld computer it is also coupled to the serial port of the handheld computer permitting transmission of the signature pad-related signals over the network (See Budinger Fig. 2A and 2B and Valliani Fig. 6).

Regarding claim 12, the signature unit is coupled to the serial port through the computer as discussed above.

Claim 27 contains the limitations of claim 11 (wherein the handheld computer also couples to the network through an LAN port or "Ethernet interface" (See Budinger column 3 lines 35-47 and column 7 lines 8-20)) and is analyzed as previously discussed with respect to those claims.

Regarding claim 28, the signature unit is coupled to the Ethernet interface through the computer as discussed above.

Regarding claim 35, Budinger in view of Chappell and Valliani does not disclose a "Web browser capable of handling Internet communication protocols".

Official Notice is taken that it is well known for computers to have a "Web browser capable of handling Internet communication protocols". Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger in view of Chappell and Valliani to include a "Web browser capable of handling Internet communication

protocols" in order to increase the capabilities of the handheld computer thereby providing the user with more resources to troubleshoot the network with.

Regarding claim 36, the input port is an RF port (See Chappell Fig. 4, 272; column 9 lines 30-40).

Regarding claim 42, the serial port is an RS-232 port (See Budinger Fig. 2b).

Regarding claim 43, "further including an RF section for processing signals received from the CATV network" (See Chappell Fig. 4; column 9 lines 31-40).

Regarding claim 44, "further including an analog-to-digital (A/D) converter, the A/D converter coupled to the RF section for conversion of RF section output into digital RF-related signals" (See Chappell Fig. 4, A/D 206).

Regarding claim 45, "further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing of the digital RF-related signals", wherein the controller processes the signals (See Chappell Fig. 4, controller 200).

Regarding claim 46, inherently the "first information is first analog information" in order for the (A/D) converter to convert "the first analog information to first digital information" (See Chappell Fig. 4, A/D 206).

Regarding claim 47, the A/D converter is coupled to the controller or "DSP" for processing the first digital information (See Chappell Fig. 4, A/D 206 and controller 200).

Claim 51 contains the limitations of claims 35 and 27 and is analyzed as previously discussed with respect to those claims.

Claim 52 contains the limitations of claims 36 and 27 and is analyzed as previously discussed with respect to those claims.

Claim 53 contains the limitations of claims 42 and 27 and is analyzed as previously discussed with respect to those claims.

Claim 54 contains the limitations of claims 43 and 27 and is analyzed as previously discussed with respect to those claims.

Claim 55 contains the limitations of claims 44 and 54 and is analyzed as previously discussed with respect to those claims.

Claim 56 contains the limitations of claims 45 and 55 and is analyzed as previously discussed with respect to those claims.

Claim 57 contains the limitations of claims 46 and 27 and is analyzed as previously discussed with respect to those claims.

Claim 58 contains the limitations of claims 47 and 57 and is analyzed as previously discussed with respect to those claims.

Claims 48-50 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Budinger et al. (US006802032B1) in view of Chappell (US006425132B1) and Valliani et al. (US006234389B1) as applied to claims 11, 12, 27, 28, 35, 36, 42-47, and 51-58 above, and further in view of and Chang et al. (US006891803B1).

Regarding claim 48, Budinger in view of Chappell and Valliani does not disclose an "audio transducer coupled to the computer for producing audio signals in response to third information received from the computer".

Chang et al. (Chang) discloses a telecommunications transmission test unit (See Fig. 2). The transmission test unit includes a speaker or "audio transducer" that is coupled to the unit inherently producing a sound or "audio signal" that are in response to audio data or "third information received from the computer" (See Fig. 2, speaker 218; column 5 lines 8-22). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger in view of Chappell and Valliani to include an "audio transducer coupled to the computer for producing audio signals in response to third information received from the computer", as taught by Chang, in order to increase the capabilities of the handheld computer thereby allowing different means of communicating information to the user.

Regarding claim 49, Budinger in view of Chappell and Valliani and in further view of Chang does not disclose a "digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer".

Official Notice is taken that it is well known to use D/A converters to convert signals that are to be outputted by analog speakers or "audio transducers". Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the handheld computer disclosed by Budinger in view of Chappell and Valliani and in further view of Chang to include a "digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer" in order make the handheld computer more compatible with different analog speakers.

Regarding claim 50, Budinger in view of Chappell and Valliani and in further view of Chang discloses a controller or "DSP" that would inherently be "coupled to the computer and to the D/A converter for processing third information and for supplying processed third information to the D/A converter" in order to successfully produce sounds from the speaker (See Chappell Fig. 4 and Chang Figs. 2 and 3A).

Claim 59 contains the limitations of claims 48 and 27 and is analyzed as previously discussed with respect to those claims.

Claim 60 contains the limitations of claims 49 and 59 and is analyzed as previously discussed with respect to those claims.

Claim 61 contains the limitations of claims 50 and 60 and is analyzed as previously discussed with respect to those claims.

Response to Arguments

3. Applicant's arguments filed 18 August 2006 have been fully considered but they are not persuasive.

Applicant argues with respect to claims 11 and 27 that Budinger, Chappell, and Valliani does not disclose a signature pad coupled to a serial port or an Ethernet interface. However, reading the claims in the broadest sense, Budinger in view of Chappell and Valliani does disclose all the limitations of the claims. Budinger discloses a PDA that is coupled to a serial port or Ethernet interface (See Budinger column 3 lines 45-47) in order to be connected to the network (See Fig. 2b). Valliani discloses that PDA's can have PCMCIA port that allows a signature pad to be interfaced with the PDA

(See Fig. 6). Therefore, Budinger in view of Chappell and Valliani discloses that the signature pad is coupled to the serial port or Ethernet interface (See Budinger column 3 lines 45-47) through the PDA (See Budinger Fig. 2b and Valliani Fig. 6).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Chappell discloses a deficiency in existing testing equipment (e.g. the lack for obtaining reverse spectrum measurements for different nodes) and offers a new field client that increases the testing capabilities (e.g. obtaining reverse measurements for different nodes) thereby providing the user with more tools to troubleshoot the network with (See Chappell column 2 lines 21-40).

Furthermore, Valliani discloses a deficiency in PDAs (e.g. the lack of obtaining signatures from clients at remotes sites) and offers a new signature pad that is interfaced to the PDA that will expand the capabilities of the PDA (e.g. to be able to obtain signatures) thereby allowing the user of the PDA to receive signatures that authorizes the provider to charge a credit card or to perform services (See Valliani Fig. 6; column 7 lines 30-48).

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone

Art Unit: 2623

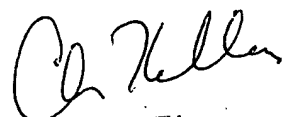
number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JGU

October 16, 2006



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